

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-68

ISSUING WATER RECLAMATION REQUIREMENTS FOR:

COUNTY OF ALAMEDA, PUBLIC WORKS AGENCY
COUNTY SERVICE AREA 85-001
GREENVILLE INDUSTRIAL CENTER WATER RECLAMATION PLANT
ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. County of Alameda, Public Works Agency, County Service Area 85-001, hereinafter called the discharger, by application dated December 27, 1984, has applied for issuance of waste discharge requirements for the proposed use of reclaimed wastewaters and wastewater disposal.
2. The discharger will generate up to 120,000 gpd (ADWF, design capacity) of sanitary and industrial wastes when the wastewater treatment facilities are constructed. Treatment will consist of solids grinding with flow equalization capability, primary sedimentation, three-stage trickling filters with interstage clarification, final clarification, flocculation and coagulation, dual media filtration, and disinfection. Treated effluent will be pumped to a 15.82 MG impervious on-site storage reservoir and dam. Treated effluent from the reservoir will be spray irrigated from a fixed sprinkler system to a 19-acre on-site disposal area. The disposal area will be bermed to divert polluted runoff back during dry weather to the reservoir. Sludge will be hauled to an offsite legal disposal site. Discharge is planned to commence in February 1986.
3. Spray irrigation is initially planned on fodder crops for intermittent grazing by cattle and sheep. Unrestricted recreational use of the reservoir is not planned as an immediate use, but will occur at a future date. The Patterson Water Treatment Plant and South Bay Aqueduct operated by Zone 7 of the Alameda County Flood Control and Water Conservation District are located nearby to the east and southeast of the spray irrigation area.

4. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations of the State Department of Health Services, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified in Findings 2 and 3 could affect the public health, safety or welfare, and requirements for those uses are therefore necessary in accordance with the Water Code.

This Order's requirementss are in conformance with and implement the wastewater reclamation criteria of the State Department of Health Services (California Administrative Code, Title 23, Division 4, Section 60301 - 60355) to protect the public health, safety and welfare.

5. The discharge is a new facility and is not presently governed by Waste Discharge Requirements.
6. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for the Alameda Creek Watershed (and contiguous waters) above Niles including the East Tesla Ground Water Basin. The beneficial uses of the East Tesla Ground Water Basin as identified in the Basin Plan are:
- ° Industrial service and process supply
 - ° Municipal and domestic supply
 - ° Agricultural supply
7. The Basin Plan contains additional specific surface and ground water quality objectives for the Alameda Creek Watershed above Niles, including the East Tesla Ground Water Basin, as follows:

SURFACE WATER QUALITY OBJECTIVES
(Alameda Creek and Tributaries)

TDS:	250 mg/l	90 day - arithmetic mean
	360 mg/l	90 day - 90th percentile
	500 mg/l	daily maximum
CHLORIDES:	60 mg/l	90 day - arithmetic mean
	100 mg/l	90 day - 90th percentile
	250 mg/l	daily maximum

GROUND WATER QUALITY OBJECTIVES
(Concentration not to be exceeded
more than 10% of the time during
one year)

Fringe Subbasins

TDS: Ambient or 1000 mg/l, whichever is lower
Nitrate (NO₃): 45 mg/l

Waters designated for use as domestic or municipal water supply shall not contain concentration of chemicals in excess of natural concentration or the limits specified in California Administrative Code, Title 22, Chapter 15, particularly Tables 2, 3, 6, and 7.

Ambient water quality conditions at the proposed project area have been determined to be 71,000 mg/l TDS and <45 mg/l Nitrate (NO₃) by Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7) at this time. Ambient conditions apply to the water bearing zone with the highest quality water.

8. Several technical studies have been submitted for the proposed project including "Groundwater Evaluation and Impact Study for Land Application of Treated Wastewater - Greenville Industrial Park" and subsequent permeability test results (Alexander Buller Associates, Inc., December 1983), "Geologic Investigation - Greenville Industrial Park, Greenville Road and Patterson Pass Road, Livermore, CA" (Alexander Buller Associates, Inc., December 1983), and "Conceptual Wastewater Management Plan for Greenville Industrial Center, Alameda County, California" (Lowry and Associates, December 1983). Additional information was submitted with the application. These studies and additional information provide evidence that the proposed project will be consistent with the Board's Basin Plan policies and Zone 7's Wastewater Management Plan regarding wastewater treatment and disposal and protection of surface and ground water beneficial uses in the Livermore-Amador Valley. Specific evidence shows that:
 - a. The City of Livermore has indicated that capacity in its municipal system and export allocation is unavailable to the proposed project in the foreseeable future.

- b. The Alameda County Public Works Agency will assume legal responsibility for the technical design review, for assurance of proper construction, and for the administration, operation and maintenance of the wastewater collection, treatment and disposal facilities in order to comply with these requirements.
 - c. Existing soil types and geology, deep ground water conditions on the site, and lining of the storage reservoir with an impermeable bottom should effectively minimize potential ground water impacts and protect ground water resources.
 - d. The reservoir dam which is underlain by two splinter faults will be reviewed and certified by Alameda County.
- 8. Effluent limitations of this Order are based on the Basin Plan, State Plans and policies, current plant performance, and best engineering judgment. The limitations are considered to be those attainable by best available technology, in the judgment of the Board.
 - 9. The County of Alameda, Board of Supervisors, has certified a final environmental impact report in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.). The project as approved by the County of Alameda, Board of Supervisors, will not have a significant effect on water quality.
 - 9. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
 - 10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT County of Alameda, Public Works Agency, County Service Area 85-001, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Direct discharge of waste to surface waters of the Alameda Creek Watershed and its contiguous tributaries above Niles is prohibited.
2. Bypass or overflow of untreated wastewater to waters of the State, either at the plant, from the collection system, from the storage reservoir, or from the spray disposal area is prohibited.

B. Effluent Limitations

1. Effluent discharged to the storage reservoir (an unrestricted recreational impoundment) shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater discharged from treatment facilities designed in compliance with the design criteria and reliability requirements of Title 22, Division 4 of the California Administrative Code and shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>30-day Average</u>	<u>7-day Average</u>	<u>Instan- taneous Maximum</u>	<u>Daily Maximum</u>
a. BOD	mg/l	30	45	-	-
b. Settleable Matter	ml/l-hr	0.1	-	0.2	-
c. Oil and Grease	mg/l	10	-	-	20
d. Suspended Solids	mg/l	30	45	-	-
e. Turbidity shall not exceed an average operating turbidity of 2 turbidity units and shall not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.					
f. Median MPN shall not exceed 2.2 coliform organisms per 100 ml of sample as determined from the bacteriological results of the last 7 analyses, nor exceed 23 coliform per 100 ml of sample in more than one sample within the last 30 analyses.					

2. Representative samples of the effluent shall not exceed the following limits⁽¹⁾:

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>6 Month Median</u>	<u>Daily Maximum</u>
a. Arsenic	mg/l	0.01	0.02
b. Cadmium	mg/l	0.02	0.03
c. Total Chromium	mg/l	0.005	0.01
d. Copper	mg/l	0.2	0.3
e. Lead	mg/l	0.1	0.2
f. Mercury	mg/l	0.001	0.002
g. Nickel	mg/l	0.1	0.2
h. Silver	mg/l	0.02	0.04
i. Zinc	mg/l	0.3	0.5
j. Cyanide	mg/l	0.1	0.2
k. Phenolic Compounds	mg/l	0.5	1.0
l. Total Identifiable Chlorinated Hydrocarbons ⁽²⁾	mg/l	0.002	0.004

(1) These limits are intended to be achieved through secondary treatment, source control, and application of pretreatment standards.

(2) Total Indentifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptacholor, lindance, dieldrin, polychlorinated byphenyls (PCBs), and other identifiable chlorinated hydrocarbons.

C. Reclaimed Water Use Limitations

1. There shall be no discharge to surface or ground waters directly from the storage reservoir.
2. Reclaimed water held in the storage reservoir shall meet the following quality limits at all times:
 - a. Dissolved Oxygen 1.0 mg/l minimum
 - b. Dissolved Sulfide 0.1 mg/l maximum

3. Storage reservoir water level must be maintained so as to meet a two-foot minimum freeboard at all times.
 4. Reclaimed water disposed of on land shall not be allowed to escape to areas outside the disposal areas by surface flow. All runoff from the spray disposal areas shall be returned to the reservoir within the first four hours following cessation of each spray irrigation event.
 5. Reclaimed water disposed of by spray irrigation shall be confined to the spray site and shall not cause surfaces of objects located offsite to become wet.
 6. The boundaries of spray disposal areas shall be set back from all water supply reservoirs in accordance with specifications of the California Department of Health Services.
 7. Dairy cows and goats shall not be allowed to graze in spray areas unless as approved by the California Department of Health Services.
 8. The use of reclaimed water shall not cause degradation of existing ground waters nor cause ground waters to exceed the following specific water quality objectives more than 10% of the time during one year:
 - a. Total Dissolved Solids 1000 mg/l maximum
 - b. Nitrate (NO_3) 45 mg/l maximum
- Where ground waters exceed the above concentrations due to natural causes, the discharger shall not cause further degradation.
9. The use of reclaimed water shall not cause rising ground waters discharging to surface waters to impair surface water quality objectives or beneficial uses.
 10. Reclaimed wastewater shall be stored and disposed of in manners which will minimize public contact with or exposure to the wastewater in compliance with the California State Department of Health Services "Guidelines for Use of Reclaimed Water Irrigation and Impoundments."

11. Storage areas, spray irrigation areas, and all equipment used in connection with reclaimed wastewater use shall be clearly identified with posted notices to the public and managed in conformance with the California State Department of Health Services "Guidelines for Use of Reclaimed Water Irrigation and Impoundments" and "Guidelines for Worker Protection at Water Reclamation Use Areas."
12. If an effluent or use requirement is violated, the discharger shall immediately terminate discharge to the storage reservoir or disposal area where the violation occurs until such violation is corrected and measures are implemented to assure it does not reoccur.

D. Provisions

1. The discharger shall comply with all sections of this order immediately upon adoption. Compliance with all discharge prohibitions, effluent limitations, and reclaimed water use limitations is required when discharge commences.
2. The discharger shall perform the following tasks:

<u>Task</u>	<u>Report of Compliance Due</u>
a. Submit Construction Design Plans and Construction Time Schedule and Revenue Plan	When Available but not later than 90 days prior to application of reclaimed wastewater
b. Submit Status Report on Construction	30 days prior to the start of construction
c. Submit Status Report on Construction	Midway point of construction
d. Submit Final Report on Completion of Construction	15 days following completion of construction
e. Submit Report of Commencement of Discharge	15 days following commencement of discharge

3. The discharger shall submit a waste disposal management plan at least 90 days prior to commencement of the discharge. The plan shall discuss storage reservoir management, irrigation disposal system, recreational use management, control of algae consistent with the State Department of Health Services "Guidelines for Use of Reclaimed Water Irrigation and Impoundments" and "Guidelines for Worker Protection at Water Reclamation Use Areas" (copies attached). The discharger shall review and update the plan annually. Annual revisions, or letters stating that no changes are needed, shall be submitted annually thereafter by May 30th of each year.
4. The discharger shall submit a contingency plan as required by Board Resolution No. 74-10 at least 90 days prior to commencement of the discharge. The plan should also include measures for reservoir and treatment plant operation in the event of a toxic chemical spill to the system and/or a reservoir dam failure. The discharger shall review and update annually its contingency plan and submit the revisions, or a letter stating that no changes are needed, annually thereafter by May 30th of each year. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
5. The discharger shall submit an Operations and Maintenance (O&M) Manual at least 90 days prior to commencement of the discharge. The discharger shall review and update the O&M Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. These revisions or a letter stating that no changes are needed shall be submitted annually thereafter by May 30th of each year. Documentation of operator input and review shall accompany each annual update.
6. The discharger shall submit a source control program comparable to at least that required in a federal pretreatment program in accordance with Sections 307(b) and 403(b)(8) of the Clean Water Act and applicable parts of the Board's Order No. 84-60 (copy attached).

The program shall be enforceable to ensure compliance with comparable pretreatment standards and/or best available technology economically available. The source control program shall be submitted at least 90 days prior to commencement of the discharge and reviewed, updated and submitted as a revised version, or letter stating that no changes are necessary, annually thereafter by May 30th of each year.

7. The discharger must notify the Regional Board as soon as it knows or has reason to believe a discharge of a toxic pollutant not limited by this permit has occurred, or will occur.
8. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
9. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except items A.3, A.12, A.14, A.16 and B.2.
10. The discharger shall permit the Regional Board or its authorized representative in accordance with California Water Code Section 13267(c):
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept.
 - b. Access to copy any records required to be kept under terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or method required by this Order.
 - d. Sampling of any discharge or reclaimed water.

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on May 15, 1985.

ROGER B. JAMES
Executive Officer

Attachments:

- Site Map
- Standard Provision & Reporting
Requirements, April 1977
- Resolution No. 74-10
- Self-Monitoring Program
- Order No. 84-60 - Attachments only
- CDHS - Guidelines for Use of Reclaimed
Water Irrigation and Improvements
- CDHS - Guidelines for Worker Protection at
Water Reclamation Use Areas

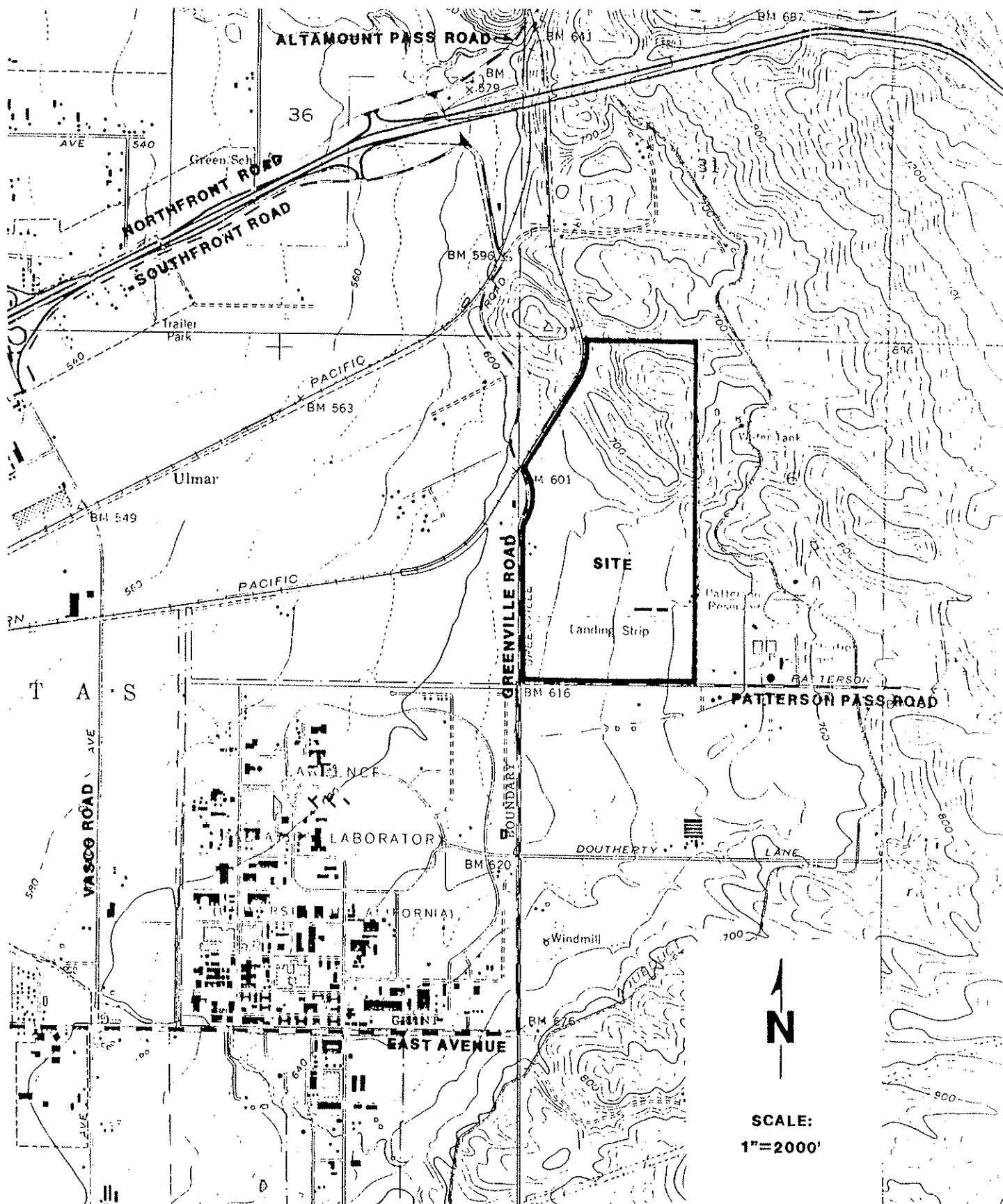


Figure 1 - Site Location Map
 (Source: DEIR, March 1984, Greenville Industrial Center)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

County of Alameda, Public Works Agency
Alameda County Service Area 85-001
Greenville Industrial Center Water Reclamation
Plant, Alameda County
Water Reclamation Requirements ORDER NO. 85-68

CONSISTING OF

PART A, dated January 1978

AND

PART B, Ordered May 15, 1985

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT - TREATMENT PLANT

<u>Station</u>	<u>Description</u>
A-1	At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment or sidestreams.

B. EFFLUENT - TREATMENT PLANT

<u>Station</u>	<u>Description</u>
E-001	At any point in the disinfection facilities for the treated effluent at which point adequate disinfection is assured prior to its discharge to the storage pond and/or disposal by spray irrigation to land.

C. STORAGE RESERVOIR - RECLAIMED WASTEWATER

<u>Station</u>	<u>Description</u>
R-1	At a point along the periphery of the reservoir near the withdrawal point for spray irrigation water.
R-2	At a popular public access/use point along the periphery of the reservoir.
R-3	At any point in the irrigation supply intake.

D. LAND OBSERVATIONS - TREATMENT PLANT, STORAGE RESERVOIR, AND SPRAY DISPOSAL AREA

<u>Station</u>	<u>Description</u>
P-1 through P-'n'	Located at the corners and midpoints of the perimeter fenceline surrounding the treatment plant.

L-1 through L-'n'	Located at 500-foot intervals around the perimeter of the storage reservoir.
D-1 through D-'n'	Located at the diversion structure (for the spray area return waters), along the top of the dam and at abutments, and along the downstream base of the dam.
S-1 through S-'n'	Located at 500-foot intervals around the perimeter of the spray disposal area.

A sketch(es) showing the locations of these stations will accompany each report.

E. OVERFLOWS AND BYPASSES - TREATMENT PLANT, COLLECTION SYSTEM, RECLAIMED WASTEWATER TRANSPORT LINE TO THE STORAGE POND, AND PERIPHERAL BERM

<u>Station</u>	<u>Description</u>
O-1 through O-'n'	Bypass or overflows from manholes, pump stations, transport lines, collection system, storage reservoir, or spray disposal area peripheral berm and outlet.

F. GROUNDWATER MONITORING WELLS

G-1	A shallow well located in alluvium which is tributary to and upgradient from the storage reservoir (background well).
G-2	A deep well located hydraulically upgradient from the storage reservoir and spray area (background well).
G-3, G-4	Shallow wells located in alluvium immediately downgradient of the reservoir dam; at least one well shall be placed in the base of the alluvium and one well shall be placed at a depth sufficient to measure shallow subsurface flow through the alluvium; additional wells may be required as necessary by the Executive Officer.

G-5 A shallow well located at the base of the alluvium at the western site boundary (Greenville Road).

G-6 A deep well located adjacent to G-5.

The approximate locations and depths of these wells shall be submitted for the approval of the Executive Officer at least 180 days prior to drilling and commencement of the discharge. Final well depths may need to be determined during drilling operations. Wells shall be constructed in accordance with criteria specified by Zone 7 of the Alameda County Flood Control and Water Conservation District.

II. SCHEDULE OF SAMPLING AND ANALYSIS

- A. The schedule of sampling, analysis and observations shall be that given in Table 1.

III. MODIFICATION OF PART A, DATED JANUARY 1978

Exclusions: C.3, C.4, 5.a, 5.c, D.3 and F.3.e.

IV. MISCELLANEOUS REPORTING

1. Copies of monitoring data shall be sent to Zone 7 of the Alameda County Flood Control and Water Conservation District.
2. The quantity of sludge removed and the disposal site shall be reported in the month of occurrence.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-68.
2. Was adopted by the Board on May 15, 1985. .
3. May be reviewed at any time subsequent to the adoption date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

ROGER B. JAMES
Executive Officer

Attachments

Table I (2 pages) 13
Notes for Table I

TABLE I (1), (2)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Order No. 85-68

Sampling Station	A-1		E-001			R-1 R-2	R-3	All P Sta.	All D Sta.	All L Sta.	All S Sta.	All O Sta.	G-3 G-4	All other G Sta.		
TYPE OF SAMPLE	C-24	G	C-24	G	Cont	G	G	O	O	O	O	O	G	G		
Flow Rate (mgd)					D							D (3)				
BOD, 5-day, 20° C. or COD (mg/l & lb/day)			3/W													
Chlorine Residual & Dosage (mg/l & lb/day) (4)				H or Cont												
Settleable Matter (ml/1-hr. & cu. ft./day)			3/W													
Total Suspended Matter (mg/l & lb/day)			M													
Oil & Grease (mg/l & lb/day) (5)		M		2/M												
Coliform (Total or Fecal) (MPN/100 ml) per req't (6)				(7) 5/W												
Water Level (feet) (8)													3M	3M		
Ammonia Nitrogen (mg/l & lb/day)							3M						3M	2/Y ⁽⁹⁾		
Nitrate Nitrogen (mg/l & lb/day)							3M						3M	2/Y ⁽⁹⁾		
Nitrite Nitrogen (mg/l & lb/day)							3M						3M	2/Y ⁽⁹⁾		
Total Organic Nitrogen (mg/l & lb/day)							3M						3M	2/Y ⁽⁹⁾		
Turbidity (Jackson Turbidity Units)			H or Cont													
pH (units)							M									
Dissolved Oxygen (mg/l and % Saturation) (10)						W										
Total Dissolved Solids (mg/l & lb/day)							M						3M	2/Y ⁽⁹⁾		
Chlorides (mg/l & lb/day)							M						3M	2/Y ⁽⁹⁾		
Secchi Disc (inches) (10)						W										
Sulfides Total (mg/l) (10)						W										
Arsenic (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		
Cadmium (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		
Chromium, Total (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		
Copper (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		
Cyanide (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		
Silver (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		
Lead (mg/l & lb/day) (11)	Y						3M						2/Y	Y ⁽⁹⁾		

TABLE I (continued) (1), (2)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Order No. 85-68

Sampling Station	A-1		E-001			R-1 R-2	R-3	All P Sta.	All D Sta.	All L Sta.	All S Sta.	All O Sta.	G-3 G-4	All other G Sta.		
TYPE OF SAMPLE	C-24	G	C-24	G	Cont	G	G	O	O	O	O	O	G	G		
Mercury (mg/l & lb/day) (11)	Y						3M						2/Y	(9) Y		
Nickel (mg/l & lb/day) (11)	Y						3M						2/Y	(9) Y		
Zinc (mg/l & lb/day) (11)	Y						3M						2/Y	(9) Y		
PHENOLIC COMPOUNDS (mg/l & lb/day) (11), (12)	Y						3M						2/Y	(9) Y		
TICH (mg/l & lb/day) (11), (12)	Y						3M						2/Y	(9) Y		
Toxic Organic Compounds (ug/l) (13), (14)	Y		Y										Y	Y ⁽⁹⁾		
All Applicable Standard Observations (15)						W	M	D	W	W	W	E	3M	3M		

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
 C-24 = composite sample - 24-hour
 TICH = Total Identifiable
 Chlorinated Hydrocarbon

 Cont = continuous sampling
 DI = depth-integrated sample
 BS = bottom sediment sample
 O = observation

FREQUENCY OF SAMPLING

E = each occurrence
 H = once each hour
 D = once each day
 W = once each week
 M = once each month
 Y = once each year

TYPES OF STATIONS

S = spray irrigation area stations
 A = treatment facility influent stations
 E = waste effluent stations
 R = storage reservoir stations
 P = treatment facilities perimeter stations
 L = storage reservoir perimeter stations
 D = diversion structure/dam stations
 G = groundwater stations

2/H = twice per hour
 2/W = 2 days per week
 5/W = 5 days per week
 2/M = 2 days per month
 2/Y = once in March and
 once in September
 Q = quarterly, once in
 March, June, Sept.
 and December

2H = every 2 hours
 2D = every 2 days
 2W = every 2 weeks
 3M = every 3 months
 Cont = continuous

NOTES FOR TABLE I

1. During any day when bypassing occurs from any treatment unit(s) in the plant or unauthorized discharge from the reservoir to surface waters, the monitoring program for the effluent or surface discharge shall include the following additional schedule for sampling, measurement and analyses if not already being performed as required in Table I above:
 - a. Composite sample for BOD and Total Suspended Solids.
 - b. Grab samples for Total Coliform, Settleable Matter, and Oil and Grease.
 - c. Continuous monitoring of flow.
 - d. Continuous or every two hour monitoring of chlorine residual.
2. Influent (A-1) and effluent (E-001) samples shall be collected during normal working days. Additionally, grab samples shall be collected during the peak flow period on days of composite sampling.
3. Volume of reclaimed wastewater used for irrigation shall be recorded daily and reported.
4. Data shall be reported using forms provided by the Board or an approved equivalent; chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.
5. Oil and Grease sampling shall consist of a grab sample. In the event that sampling shall for oil and grease every two weeks or less frequently shows an apparent violation of the waste discharge permit, 30-day average limitation (considering the results of one or two days sampling as a 30-day average), then the sampling frequency shall be increased to weekly so that a true 30-day average can be computed and compliance can be determined.
6. Coliform sampling may be modified by the Executive Officer upon written request with submittal of BOD/Turbidity correlation data.
7. Coliform sampling will be increased to seven (7) days per week (7/W) when nonrestricted recreational uses of the reservoir or areas affected by spray irrigation operations commence.
8. Water level in groundwater monitoring wells (all G Stations) shall be measured and reported as depth below ground surface. The report shall note whether wells are found dry, moist (insufficient water to obtain a sample), or otherwise.
9. Groundwater monitoring well stations G-1, G-2 and all other G Stations (excluding G-3 and G-4) shall be sampled twice (in March and September) for the nitrogen series, total dissolved solids and chloride and once (in March) for all metals, phenolic compounds, TICH, and toxic organic compounds during or prior to the first year of plant operation in order to obtain background concentrations. Sampling frequency shall be increased to quarterly on a regular basis in these wells for those constituents detected in wells G-3 and/or G-4 at higher than background levels.

10. Reservoir stations (R-1 and R-2) samples shall be collected at least one foot below water surface.
11. If any sample is in violation of pretreatment (A-1), effluent (R-3), or drinking water limits (G Stations), sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples.
12. The individual constituents analyzed in the tests for phenolic compounds and Total Identifiable Chlorinated Hydrocarbons and the appropriate detection limit shall be reported.
13. Samples for toxic organic compounds in influent (A-1) and effluent (E-001) shall be collected as five grab samples taken at equal intervals during normal weekday working hours and preserved, transported, composited by the analytical laboratory, and analyzed in accordance with EPA Test Methods 624 and 625. Reported results shall include the detection limits and the identification and quantification of the five highest non-priority pollutant peaks detected. Groundwater monitoring well stations samples shall be collected as grab samples. The analytical method may be amended by the Executive Officer upon written request and submittal of data by the discharger.
14. One grab sample for background toxic organic compound data shall be collected during the first year of plant operation at influent (A-1), effluent (E-001), and groundwater G-3 and G-4 stations as described in Note 13. Sampling frequency shall be increased to twice yearly at A-1, E-001, G-3 and G-4 stations when industrial waste sources (i.e. other than sanitary or restaurant food sources) commence discharge to the treatment facilities. Furthermore, sampling at all other G wells shall commence if toxic organic compounds are detected in wells G-3 and/or G-4.
15. The report shall include the following observations in addition to the standard applicable observations:
 - a. R (reservoir) Stations - vegetative growth (e.g. duckweed, algae, or other vegetation), presence of insect vectors, and applicable corrective actions taken or planned.
 - D Stations - leaks or seeps in the dam, at abutments or along the base of the dam; flows from the diversion structure to the stream not permitted by Order No. 85-68 ; and corrective actions taken or planned.
 - S (spray area) Stations - observations of diversion berm integrity and any runoff from bermed areas shall be made only during weeks when spray irrigation occurs.